

was obtained at Cape St. Lucas by Mr. Xantus. The *Dicrotus armatus* of Günther was also founded on a young fish, of which it was remarked by its describer, with a happy foresight, that "several of the characters mentioned may be modified in a mature state." That species might, indeed, but for the homogeneity of the dorsal and anal fins, be considered as the young of *Prometheus prometheoides*. As Dr. Günther has, however, positively denied pinnules to the genus, and, as the pinnules appear to be developed in the young as well as the old, the genus *Dicrotus* may, until further known, be regarded as distinct.

The subfamily of *Orcyninae*, as characterized in a former paper, might, perhaps, be rather subdivided, if the number of pyloric appendages should be found to be coincident with other characters. In that case the following arrangement might be advisable :

SCOMBRINÆ.

ORCYNINÆ.—Caudal peduncle of adult with a median adipose carina, and two converging backwards, one above and one below. Pyloric cæca dendritical or very numerous.

THYRSITINÆ.—Caudal peduncle not carinated. Pyloric cæca developed in moderate or rather small numbers, (7—10.)

GEMPYLINÆ.

The genus *Acanthocybium** having the spinous dorsal longer than the soft, the proportions of those fins cannot be used in the present state of our knowledge to distinguish the two subfamilies.

The name *Orcynus* has been, by an unfortunate misapprehension, applied instead of *Orcynus*; and it is hoped that the latter will in all cases be substituted as the correct orthography.

Note on some Genera of FISHES of Western North America.

BY THEODORE GILL.

In the Proceedings of the Academy for July, 1861, a number of genera have been established for species previously described from the western waters of North America. In the present article, several additional genera are introduced; and to formerly established ones, species described under other generic names have been referred.

SCORPÆNOIDS.

SEBASTICHTHYS Gill.

This genus embraces all the species referred to the genus *Sebastes*, which has eleven to twelve (XI. + I.—XII. + I.) spines in the first dorsal fin, palatine teeth and the physiognomy of *Sebastes* (*Norvegicus*.) I believe that I may be permitted to announce, that Dr. Ayres, in a letter of May 6th, has informed me that he knows eleven species belonging to the Cuvierian genus *Sebastes* to be inhabitants of the Californian waters. Five of them have been referred to the genus *Sebastes* and six to *Sebastodes*, the latter having been modified to embrace the species of which the head is "nearly smooth," while the name *Sebastes* is restricted to those of which "the summit of the head is strongly ridged." Such a division appears to me to be inadmissible, and I believe that *Sebastodes* must be retained with the characters I have assigned to it, while all other described species of California belong to one and the same natural genus, for which the name *Sebasticthys* has been proposed. The

* The *Cybium petus* of Poey and *C. solandri* C. V. are true species of this genus.

only species of whose affinity I entertain any doubt is the *S. elongatus* Ayres; that species, however, appears to be either a *Sebastichthys* or closely related to that genus. As to the number of species, I am disposed to doubt whether all are valid or even distinct from each other; the *S. helvomaculatus* Ayres appears to be identical with *S. ocellatus* Cuv. et Val. As Dr. Ayres kindly announces his intention to forward a full series, I trust soon to be enabled to satisfy myself regarding such doubtful points.

1. SEBASTICHTHYS NIGROCINCTUS = *Sebastes nigrocinctus* Ayres.

CARANGOIDS.

PARATRACTUS Gill.*

PARATRACTUS BOOPS. *Syn.* *Trachurus boops* Grd.

GOBIOIDS.

EUCYCLOGOBIUS Gill.

Eucyclogobius differs from *Lepidogobius* in form, nudity of the head and the smaller second dorsal fin.

2. EUCYCLOGOBIUS NEWBERRYII. *Syn.* *Gobius Newberrii* Girard.

GOBIESOCOIDS.

CAULARCHUS Gill.

The present genus differs principally from *Gobiesox Lac.* (= *Sicyogaster Barneville*) by the nearly equal size of the dorsal and anal fins, and the nearly horizontal direction of the six compressed trenchant incisors of the lower jaw.

3. CAULARCHUS RETICULATUS. *Syn.* *Lepodogaster reticulatus* Girard.

CYCLOPTEROIDS.

EUMICROTREMUS Gill.

Differs from *Cyclopterus Artdi* by the smaller branchial apertures situated at the horizon of the eyes, and by the development of the spinous dorsal fin. The type is the *Cyclopterus spinosus* of Müller.

EUMICROTREMUS ORBIS. *Syn.* *Cyclopterus orbis* Gthr.

SALMONOIDS.

HYPISIFARIO Gill.

This genus embraces a single known species, distinguished by its compressed body, projecting snout, &c.

HYPISIFARIO KENNERLYI. *Syn.* *Salmo kennerlyi* Suckley.

PLEURONECTOIDS.†

LEPIDOPSETTA Gill.

LEPIDOPSETTA UMBROSA = *Psettichthys umbrosus* Grd.

HYP SOPSETTA Gill.

HYP SOPSETTA GUTTULATUS = *Pleuronichthys guttulatus* Grd.

ORTHOSETTA Gill.

ORTHOSETTA SORDIDA = *Psettichthys sordidus* Grd.

UROSETTA Gill.

UROSETTA CALIFORNICA = *Hippoglossus californicus* Ayres.

* Type *Caranx pisquetos* C. V. = *C. chrysos* auct. nec *Mitc.*

† A synopsis of this family may be soon expected.

TETRAODONTOIDS.

GASTROPHYSUS Müller.

GASTROPHYSUS POLITUS. *Syn.* Tetraodon politus Girard.

STURIONOIDS.

ANTACEUS Fitz. and Heckel.

ANTACEUS BRACHYRHYNCHUS. *Syn.* Acipenser brachyrhynchus Ayres.ANTACEUS TRANSMONTANUS. *Syn.* Acipenser transmontanus Rich.ANTACEUS MEDIROSTRIS. *Syn.* Acipenser medirostris Ayres.ANTACEUS ACUTIROSTRIS. *Syn.* Acipenser acutirostris Ayres.

CHIMÆROIDS.

HYDROLAGUS Gill.

Distinguished from Chimæra on account of the absence of an anal fin and the triple division of the sexual organs of the male.

HYDROLAGUS COLLIEI. *Syn.* Chimæra colliei Lay and Bennett.

HETERODONTOIDS.

GYROPLEURODUS Gill.

GYROPLEURODUS FRANCISCI = Cestracion francisci Grd.

MYLIOBATOIDS.

HOLORHINUS Gill.

This genus is founded on a species which differs from Myliobatis by the transverse entire snout. The median teeth are very broad, and the lateral hexagonal ones have nearly equal sides.

HOLORHINUS VESPERTILIO. *Syn.* Rhinoptera vespertilio Girard.

PETROMYZONTOIDS.

LAMPETRA Gray.

LAMPETRA PLUMBÆA. *Syn.* Petromyzon plumbeus Ayres.

ENTOSPHEMUS Gill.

ENTOSPHEMUS TRIDENTATUS = Petromyzon tridentatus Rich. = P. lividus Grd.

" EPIHEXODON = " tridentatus Grd. (nec Rich.)

" CILIATUS = " ciliatus Ayres.

" ASTORI = " astori Grd.

The following list of the genera belonging to the Fauna of the Western coast of America north of Cape San Diego, not presented in Dr. Girard's Report, and exclusive of those in my "Notes," may be of use:

PERCOIDS. Stereolepis Ayres.

PIMELEPTEROIDS. Girella Gray.

SCIÆNOIDS. Rhinoscion Gill (vice Amblodon Grd.) Menticirrhus Gill (vice Umbrina Grd. fide spec.) Gynonemus Gill (vice Leiostomus Ayres, Grd.) Atractoscion Gill. Cynoscion Gill, (Ayres.) Seriphus Ayres.

LABROIDS. Semicossyphus Gthr. Chærojulis Gill.

EMBIOTOCOIDS. Hypsurus A. Ag. Holconotus Ag. Cymatogaster Gib. (vice Holconotus Grd.) Hyperprosopon Gib. (vice Ennichthys Grd.) Hypocritichthys Gill. Brachyistius Gill.

CARANGOIDS. Naucrates Raf., Gthr.

STROMATEOIDS. Poronotus Gill, (Ayres.)

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- ECHENEIDIDS. *Echeneis L. Remora Gill.*
 COTTOIDS. *Potamocottus Gill, (Cottopsis gulosus Grd.) Oncocottus Gill.*
Gymnacanthus Sw. Temnistia Rich. Blepsias Cuv.
 AGONOIDÆ. *Podothecus Gill,* (= Paragonus Gill.)*
 CHIROIDS. *Oxylebius Gill.*
 TRICHODONTOIDS. *Trichodon Steller.*
 GOBIOIDS. *Lepidogobius Gill.*
 BLENNIOIDS. *Anoplarchus Gill, Günther.*
 PSYCHROLUTOIDS. *Psychrolutes Gthr.*
 AULORHYNCHOIDS. *Aulorhynchus Gill.*
 ALEPIDOSAUROIDS. *Caulopus Gill.*
 SALMONOIDS. *Hypomesus Gill, (lapsu calami etiam Mesopus.) Osmerus Art.*
(vice Thaleichthys Grd.)
 CYPRINODONTOIDS. *Cyprinodon Lac. (Grd.)*
 CLUPEOIDS. *Alausa Val.*
 MURÆNOIDS. *Muræna L. (Ayres.)*
 OPHIDIUROIDS. *Myrichthys Girard.*
 SYNGNATHOIDS. *Dermatostethus Gill.*
 GALEORHINOIDS. *Nov. gen. Isoplagiodon Gill, a sp.*
 RHINOIDS. *Rhina Klein, (Ayres.)*

Aug. 5th.

Vice-President BRIDGES in the Chair.

Ten members present.

The following papers were presented for publication :

A Report upon Mr. Buckley's Description of Plants, No. III., Gramineæ. By Asa Gray.

Notes on certain Reptiles of the New World. By E. D. Cope.

Aug. 26th.

Vice-President BRIDGES in the Chair.

Thirteen members present.

On report of the respective Committees, the following papers were ordered to be published in the Proceedings :

A Report upon Mr. S. B. Buckley's "Description of PLANTS, No. 3, Gramineæ." Published in the Proceedings of the Academy of Natural Sciences of Philadelphia, February, 1862.

BY ASA GRAY.

As it appears to have been impracticable to act upon the suggestion with which I concluded my remarks upon Mr. Buckley's preceding botanical papers, (vide p. 168,) all that remains is, to repair the damages sustained by this

* Deceived by the comparisons of authors, the identity of *Podothecus peristethus* with *Agonus acipenseroides* was not recognized until an opportunity was afforded of examining Tilesius' description and figure.

[August,

foray as well as we can, sincerely hoping that it may be the last. The specimens which Mr. Buckley has here described having been kindly collected (a few excepted which have not yet been found) by the Botanical Curators, I referred them, in the first instance, to our best instructed agrostologist, Professor George Thurber. His careful and conscientious notes (except in a few instances) form the basis and substance of the following report. I have, however, verified them as far as I could; and I hold myself responsible for the statements herewith presented. If some of my comments be thought severe, it should be understood that Mr. Buckley was duly warned of the injury he was about to inflict upon science, and was besought to submit the specimens of his supposed new species of grasses to some competent agrostologist before publication. This disregard of good counsel and reckless miscalculation of scientific fitness for such undertakings, and the astonishing breach of comity and confidence (to use the gentlest words) by gross appropriation or suppression of the names of Nuttall and others, recorded in a public herbarium, which the following pages disclose, are traits which seem to illustrate and explain each other.

Polygona alopecuroides, Buckley. The first thing to notice is, that Mr. Buckley has suppressed Nuttall's name, under which he communicated the plant to the Academy's herbarium, and doubtless to the Hookerian, if not to other herbaria,—viz.: *Deyeuxia alopecuroides*! Then he has mistaken the genus at least as widely as Nuttall did. In fact, this grass differs from *Agrostis exarata*, Trin. in nothing notable except in its denser and lobate panicle and in the awn; which last Bongard detected in some specimens of *A. exarata*. If distinct, Nuttall's specific name will be adopted, unless the plant is already published under some other; i. e., it will be *Agrostis alopecuroides*. We have a far larger form of it from Hooker's Oregon duplicates, without a name.

Vilfa agrostoides. No specimens so ticketed have yet been found. But one of *Sporobolus cryptandrus*, ticketed by Mr. Buckley "Agrostis, North-east Texas," is probably the plant in question.

Sporobolus (Vilfa) angustus is *Sporobolus Indicus*, R. Br., *Agrostis Indica*, L. Having adopted the genus *Vilfa* in the preceding and following cases, Mr. Buckley has a curious way of including it under *Sporobolus* besides.

Vilfa rigida is *Calamagrostis gigantea*, Nutt., also *C. longifolia*, Hook.

Vilfa (Sporobolus) alba. Here, *vice versa*, *Sporobolus* is subordinated to *Vilfa*; and the present new species of this double-headed genus is *Eatonia obtusata*!

Sporobolus (Vilfa) arenaceus, (again this side up!) is described from No. 737 of Wright's collection, and the fact suppressed: it is *Sporobolus asperifolius*, Nees and Meyen, fide Munro.

Uralepsis (Tricuspis) elongata, which is the same as 2054 of Wright's coll., and 307 of one of Drummond's collections, is *Tricuspis trinerviglumis*, Munro, MSS., near *T. mutica*, Torr.

Vilfa (Sporobolus) varians, described from some specimen of Nuttall's, which is not yet found.

Sporobolus (Vilfa) diffusissimus is *S. airoides* Torr.

Vilfa (Sporobolus) Sabeanae is *S. Coromandelianus*, Kunth (non Trin.), an old and widely diffused species, to which, according to Col. Munro, belong *S. commutatus*, Kunth and Trinius, *S. argutus*, Kunth, *S. Arkansanus*, Trin., and *Vilfa ambigua*, Steud.

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